

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for aggregating a semi-additive measure over an additive dimension of a cube and over a non-additive account dimension of the [[a]] cube, the method comprising:

generating a user interface comprising a plurality of user-selectable elements;
in a computing device, aggregating a plurality of members of the additive dimension using an additive aggregation function;

in a computing device, evaluating a ~~the~~ parent member for a first account comprising a plurality of first members of the non-additive account dimension by aggregating the first members according to a first aggregation function selected using a first user-selectable element of the user interface and aggregating first data from a first data table; and

in the computing device, evaluating the parent member for a second account comprising a plurality of second members of the non-additive account dimension by aggregating the second members according to a second aggregation function that is different from the first aggregation function, the second aggregation function being selected using a second user-selectable element of the user interface and aggregating second data from a second data table; and

outputting the evaluated parent member for the first and second accounts,

wherein the non-additive account dimension has a parent member that includes at least one child member selected from the first members and the second members.

2. (Currently Amended) The method of claim 1, further comprising using the user an interface to receive input from a user to designate the measure as a semi-additive measure.

3. (Currently Amended) The method of claim 1, further comprising using the user an interface to receive input from a user to select an additive aggregation function with which to aggregate additive dimensions of the cube.

4. (Currently Amended) The method of claim 1, further comprising using the user ~~an~~ interface to receive input from a user to pair the non-additive dimension with a non-additive by account aggregation function.
5. (Currently Amended) The method of claim 1, further comprising using the user ~~an~~ interface to receive input from a user to pair the first account with the first aggregation function.
6. (Currently Amended) The method of claim 5, wherein using the user ~~an~~ interface to receive input from a user to pair the first account with the first aggregation function comprises providing an interface that enables a user to pair the first account with ~~the~~ a first account type, the first account type being associated with the first aggregation function.
7. (Currently Amended) The method of claim 6, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with one of an income account type, an expense account type, a flow account type, a balance account type, an asset account type, a liability account type, a statistical account type, and a missing account type.
8. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with a null aggregation function.
9. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with an average of children aggregation function.
10. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with a first child aggregation function.
11. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with a last child aggregation function.

12. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with a first non-empty child aggregation function.

13. (Currently Amended) The method of claim 5, comprising using the user ~~an~~ interface to receive input from a user to pair the first account with a last non-empty child aggregation function.

14. (Currently Amended) A computer-readable storage medium having computer-executable instructions that, when executed by a computing device, cause the computing device to aggregate a semi-additive measure over an additive dimension of a cube and over a non-additive account dimension of the [[a]] cube by:

generating a user interface comprising a plurality of user-selectable elements;

aggregating a plurality of members of the additive dimension using an additive aggregation function;

evaluating a ~~the~~ parent member for a first account comprising a plurality of first members of the non-additive account dimension by aggregating the first members according to a first aggregation function selected using a first user-selectable element of the user interface and aggregating first data from a first data table; and

evaluating the parent member for a second account comprising a plurality of second members of the non-additive account dimension by aggregating the second members according to a second aggregation function that is different from the first aggregation function, the second aggregation function being selected using a second user-selectable element of the user interface and aggregating second data from a second data table; and

outputting the evaluated parent member for the first and second accounts,

wherein the non-additive account dimension has a parent member that includes at least one child member selected from the first members and the second members.

15. (Withdrawn) A method for aggregating a measure over a non-additive dimension of a cube, the non-additive dimension having a parent member that includes at least one child member, the method comprising:

in a computing device, providing an interface comprising a plurality of user-selectable elements, each user-selectable element associated with a respective non-additive aggregation function;

receiving, in the computing device, a user selection of two of the user-selectable elements;

in the computing device, for each selected user-selectable element, associating at least one child member of the non-additive dimension with the non-additive aggregation function that is associated with the each selected user-selectable element; and

in the computing device, evaluating the parent member by aggregating the at least one child member according to the non-additive aggregation functions associated with the at least one child member of the non-additive dimension.

16. (Withdrawn) The method of claim 15, further comprising providing an interface that enables the user to designate the measure as a semi-additive measure.

17. (Withdrawn) The method of claim 15, further comprising providing an interface that enables the user to pair an additive aggregation function with additive dimensions of the cube.

18. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a non-additive by account aggregation function with the non-additive dimension.

19. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair an average of children aggregation function with the non-additive dimension.

20. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a first child aggregation function with the non-additive dimension.

21. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a last child aggregation function with the non-additive dimension.
22. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a first non-empty child aggregation function with the non-additive dimension.
23. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a last non-empty child aggregation function with the non-additive dimension.
24. (Withdrawn) The method of claim 15, comprising providing an interface that enables the user to pair a null aggregation function with the non-additive dimension.
25. (Currently Amended) A computer-readable storage medium having computer-executable instructions that, when executed by a computing device, cause the computing device to aggregate a semi-additive measure over an additive dimension of a cube and over a non-additive dimension of the [[a]] cube by:
- aggregating a plurality of members of the additive dimension using an additive aggregation function;
 - providing a first interface comprising a plurality of first user-selectable elements, each first user-selectable element associated with a respective account type;
 - receiving a user selection of at least two of the first user-selectable elements;
 - defining, based on the selected first user-selectable elements, a first account associated with a first data table and comprising a plurality of first members of the non-additive dimension and a second account associated with a second data table and comprising a plurality of second members of the non-additive dimension, the non-additive dimension having a parent member that includes at least one child member selected from the first members and the second members;

providing a second interface comprising a plurality of second user-selectable elements, each second user-selectable element associated with a respective non-additive aggregation function;

for each of the first and second accounts, receiving a user selection of one of the second user-selectable elements;

associating the first account with the non-additive aggregation function that is associated with the second user-selectable element that was selected for the first account;

associating the second account with the non-additive aggregation function that is associated with the second user-selectable element that was selected for the second account;
and

evaluating the parent member by aggregating the first members according to the non-additive aggregation function associated with the first account and by aggregating the second members according to the non-additive aggregation function associated with the second account.

26. (Currently Amended) A system for analytically modeling data, the system comprising:

a processor;

a memory;

a display operatively connected to the processor and controlled by the processor to generate a user interface comprising a plurality of user-selectable elements; and

a relational data source, an analytical data service, and a reporting client in data communication with the processor;

wherein the analytical data service includes a mechanism for aggregating a semi-additive measure over an additive dimension of a cube and over a non-additive account dimension of the [[a]] cube, said mechanism comprising means for aggregating a plurality of members of the additive dimension using an additive aggregation function, means for evaluating a parent member for a first account comprising a plurality of first members of the non-additive account dimension by aggregating the first members according to a first aggregation function selected using a first user-selectable element of the user interface and aggregating first data from a first data table, and means for evaluating the parent member for

a second account comprising a plurality of second members of the non-additive account dimension by aggregating the second members according to a second aggregation function that is different from the first aggregation function, the second aggregation function being selected using a second user-selectable element of the user interface and aggregating second data from a second data table; and

wherein the reporting client outputs the evaluated parent member to a user.

27. (Currently Amended) The system of claim 26, wherein said mechanism further comprises means for using the user ~~an~~ interface to receive input from a user to designate the measure as a semi-additive measure.

28. (Currently Amended) The system of claim 26, wherein said mechanism further comprises means for using the user ~~an~~ interface to receive input from a user to select an additive aggregation function with which to aggregate additive dimensions of the cube.

29. (Currently Amended) The system of claim 26, wherein said mechanism further comprises means for using the user ~~an~~ interface to receive input from a user to pair the non-additive dimension with a non-additive by account aggregation function.

30. (Currently Amended) The system of claim 26, wherein said mechanism further comprises means for using the user ~~an~~ interface to receive input from a user to pair the first account with the first aggregation function.

31. (Currently Amended) The system of claim 26, wherein said mechanism further comprises means for using the user ~~an~~ interface to receive input from a user to pair the first account with the a first account type, the first account type being associated with the first aggregation function.

32. (Original) The system of claim 31, wherein the first account type comprises one of an income account type, an expense account type, a flow account type, a balance account

type, an asset account type, a liability account type, a statistical account type, and a missing account type.

33. (Original) The system of claim 26, wherein the first aggregation function comprises one of a null aggregation function, an average of children aggregation function, a first child aggregation function, a last child aggregation function, a first non-empty child aggregation function, and a last non-empty child aggregation function.

34. (Withdrawn) A system for analytically modeling data, the system comprising:
a processor;
a memory; and
a relational data source, an analytical data service, and a reporting client in data communication with the processor;
wherein the analytical data service includes a mechanism for aggregating a measure over a non-additive dimension of a cube, the non-additive dimension having a plurality of child members, said mechanism comprising means for providing an interface comprising a plurality of user-selectable elements, each user-selectable element associated with a respective non-additive aggregation function, means for receiving a user selection of two of the user-selectable elements; means for, for each selected user-selectable element, associating at least one child member of the non-additive dimension with the non-additive aggregation function that is associated with the each selected user-selectable element, and means for evaluating a parent member by aggregating child members according to the non-additive aggregation functions associated with the at least one child member of the non-additive dimension; and
wherein the reporting client outputs the evaluated parent member to a user.

35. (Withdrawn) The system of claim 34, wherein said mechanism further comprises means for providing an interface that enables the user to designate the measure as a semi-additive measure.

36. (Withdrawn) The system of claim 34, wherein said mechanism further comprises means for providing an interface that enables the user to pair an additive aggregation function with additive dimensions of the cube.

37. (Withdrawn) The system of claim 34, wherein the non-additive aggregation function comprises one of a non-additive by account aggregation function, an average of children aggregation function, a first child aggregation function, a last child aggregation function, a first non-empty child aggregation function, a last non-empty child aggregation function, and a null aggregation function.